

2009 H1N1 Influenza Research Brief

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Preliminary Findings: Study of the Impact of the 2009 H1N1 Influenza Pandemic on Latino Migrant Farm Workers in the U.S.

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In the summer of 2009, the Center for Biosecurity of UPMC sought to investigate social threats to the health and well-being of Latino migrant and seasonal farm workers (MSFWs) in the U.S. in connection with the 2009 H1N1 influenza outbreak. Such threats included stigmatization, limited access to care, and material circumstances interfering with the ability to follow public health guidelines on disease containment.

This research brief presents preliminary study findings, concluding with recommendations to providers on serving a population that is highly vulnerable to pandemic influenza due to their marginal social position and already compromised health status. The guidance pertains principally to the provision of vaccination to MSFWs for the present (ie, fall 2009) and potential third wave of disease. A more complete account of study observations and implications is planned in the near future.

Background Facts on Migrant and Seasonal Farm Workers in the U.S.

Migrant and seasonal farm workers (MSFW) are a large, mostly temporary workforce that helps sustain the U.S. agricultural industry. Despite their critical societal contribution, crop workers are extremely low-paid employees who face many occupational hazards and complex barriers to health services. These barriers include frequent mobility, lack of health insurance, low literacy, culture and language differences, and fear of being deported due to undocumented status.

It is estimated that there are more than 3 million MSFWs in the U.S., although an accurate number is difficult to establish.¹ Migrant farm workers leave their permanent residences in the southern U.S., Mexico, Central America, and the Caribbean to pursue agricultural jobs. In general, they migrate northward, in synch with growing and harvesting seasons. Some migrants relocate several times during the year, while others remain at the same farm for an entire season. Seasonal farm workers, in contrast, work close enough to commute from home.²

MSFWs plant, cultivate, harvest, process, and pack food for shipment and consumption; they also work in the fishery, poultry, meat packing, dairy, and timber industries. In the U.S., 85% of fruit and vegetable crops are hand harvested and/or cultivated, and without the timely influx of migrant labor during peak periods, production in this \$28 billion industry would cease.³ MSFWs work in at least 42 of the 50 states.⁴ States hosting the largest numbers include California, Colorado, Florida, Georgia, Idaho, Illinois, Michigan, New York, North Carolina, Oregon, Texas, and Washington.^{5,6}

The most recent MSFW demographic data comes from the National Agricultural Workers Survey (NAWS) conducted in FY2001–2002,⁷ which indicates that 75% of crop workers were born in Mexico, and 83% identified themselves as Hispanic. Of the crop laborers surveyed, 25% were U.S. citizens, 21% were legal

permanent residents, and 53% lacked authorization to work in the U.S. (Regardless of their legal status, however, many farm workers report experiencing prejudice and hostility in their host communities.³)

Crop laborers tend to be young and male: The average age was 33, with 50% younger than 31. Among NAWS respondents, 79% were male, 58% were married, and 51% were parents. When interviewed, 57% were living apart from all nuclear family members. A majority (81%) reported Spanish as their native language, with 45% noting they could not speak English “at all.” On average, the highest education level completed was seventh grade.

NAWS respondents had average hourly earnings of \$7.25, although 19% reported earning less than \$6.00 per hour. Total family income averaged between \$15,000 and \$17,499; 30% of all crop workers had total family incomes below the poverty line. A majority (72%) reported that they were not covered by health insurance, 54% noted that they were not covered by unemployment insurance if they lost their job, and 22% noted that they or another household member had used at least one type of needs-based public assistance program.

Table: Background Facts on MSWF in U.S.*

Born in Mexico	75%
Hispanic	83%
U.S. citizens	25%
Legal permanent residents	21%
No auth. to work in U.S.	53%
Average age	33 (50% <31)
Male	79%
Married	58%
Is a parent	51%
Living apart from family	57%
Native Spanish speaker	81%
No English	45%
Average hourly income	\$7.25 (19% <\$6.00)
Average family annual income	\$15,000 - \$17,499
Family income below poverty line	30%
No health insurance	72%
No unemployment insurance	54%
Use of needs-based public assistance	22%

* National Agricultural Workers Survey, FY2001–2002⁷

Study Methods

Over an 11-week period from July to October 2009, the authors conducted semi-structured telephone interviews, 45 minutes in length, with 27 executives from community clinics, government agencies, and advocacy groups serving migrant and seasonal farm workers. Using prepared questions, investigators inquired about the organization’s interaction with MSFWs, the timing and extent of the MSFW presence in local/regional communities, instances of stigmatization during the first H1N1 wave, MSFW healthcare seeking behavior, living conditions and other factors influencing compliance with disease containment measures, and advice for authorities on protecting MSFWs during the anticipated fall wave of H1N1. The research team contacted national MSFW organizations, and they used purposive sampling to reach providers and nonprofits in areas that had large numbers of Latino and MSWF residents and that represented diverse U.S. regions.

Preliminary Study Findings

1. Sporadic reports of stigma emerged against a background of anti-immigrant sentiment.

Stigmatization of Spanish-speaking people was one of the feared consequences of the 2009 H1N1 influenza outbreak in the U.S., based on news reports and on anecdotes from health authorities and organizations representing Hispanic communities.^{8,9} The blaming of "outsiders," including people with a different national, ethnic, or religious background, is a frequent occurrence during outbreaks of infectious disease.^{10,11} In the case of the 2009 H1N1 influenza ("swine flu") outbreak, people of Mexican descent were an easy target, given the minority status of this group in the U.S. (and pre-existing prejudice against them), the raging political controversy about the southern U.S. border, and the fact that Mexico was the first country to report the disease and to suffer large numbers of seriously ill patients. The moniker "Mexican flu" also was in limited circulation during the spring wave of illness.¹²

Study interviews elicited sporadic but not widespread reports of Latino MSFWs being singled out as potential threats and shunned by the host community. Interviewees nonetheless conveyed a number of anecdotes in which Latino MSFWs were targets, or perceived themselves to be targets, of majority fears about H1N1. Grocery shopping with her child, a female farm worker was publicly bullied by local residents who accused her of "bringing in" swine flu during the early days of the pandemic. A school denied admission to the child of a family who had just arrived from Mexico during the last week of April; the family was also asked to stay in "quarantine" until they had proof of being uninfected. Shops in one community reportedly had signs in their windows telling Mexicans to keep out. Latino parents visiting a hospital emergency room recounted that doctors isolated their symptomatic child and then ignored them for hours.

In areas where interviewees related no known instances of MSFWs being stigmatized, one explanation given was that the region's majority population was Hispanic and not likely to blame others who shared a common cultural and ethnic background. Another explanation offered was the fact that H1N1 had emerged in late April at a time in the region's agricultural cycle when MSFWs had yet to arrive, thus no local occasion for blaming Latino MSFWs for the flu presented itself. One interviewee also noted that while H1N1 did not give rise to any "new" instances of prejudice against Latino farm workers, there was a constant level of anti-immigrant sentiment in the community. (As the authors did not directly survey farm workers, but instead spoke to organizational intermediaries, the study may not have uncovered the full extent of prejudice possibly encountered at the individual level.)

2. Ingrained barriers to care are likely to delay or prevent vaccination against or treatment for 2009 H1N1 influenza among MSFWs.

Complex barriers prevent migrant farm workers from seeking medical care, particularly for disease prevention or during the early stages of a condition or infection. Many migrant workers are unaware of the availability of services at migrant health clinics or Federally Qualified Health Centers (FQHCs). Mobile populations that are not well integrated into their surrounding communities are difficult to reach and educate regarding available services. Lack of sick leave also prevents many from seeking care, because they fear losing their jobs, and clinics may be open only during work hours. Because this population tends to reside in generally isolated rural communities, transportation to and from health clinics remains a major obstacle to obtaining care.

Migrant workers are also disproportionately without health insurance and typically cannot afford the cost of health services,⁴ even at the reduced rates of a community health clinic. Lack of insurance leads to waiting until a condition worsens to seek care, which leads to poor outcomes, long term health problems, and increased healthcare costs. While FQHCs are more affordable, waiting until a condition worsens often leads to visits to a hospital emergency room, where bills can be crippling for a MSFW.³ These costs discourage this population from seeking care. Medicaid and State Children's Health Insurance Program (SCHIP) benefits are available to some workers but are administered on a state-by-state basis, making it difficult for many MSFWs to make use of these programs.³

Whether documented or undocumented, MSFWs can be discouraged by the presence of Homeland Security Immigration and Customs Enforcement (ICE) officials in local communities, and, in at least one instance, staking out near healthcare services. MSFWs are hesitant about engaging in "unessential" road travel, lest they be pulled over by ICE or any other law enforcement official, which creates reticence to attend a clinic. One clinic interviewed for this study reached a verbal agreement with ICE to prevent officials from coming onto clinic property; this measure was intended to help build trust within the community and encourage MSFWs to seek care. Despite these and other efforts, fear of ICE and the fear of possible deportation more broadly continue to reduce MSFW's willingness to seek medical care. In one southern state, a 17 year-old worker had never seen a physician for fear of deportation.

Furthermore, interviewees noted that cultural differences, such as fatalism among MSFW communities and machismo (pride) among men, prevent individuals from seeking medical care. Federally subsidized public health care in Mexico and unfamiliarity with the American system creates confusion over payment for healthcare services. Medical literacy and language barriers also continue to be challenges in delivery of health care to this population.⁴

3. Meager living conditions may inhibit compliance with official guidance on disease containment.

Limited work benefits, precarious childcare arrangements, and cramped, substandard living quarters interfere with the ability of MSFWs to follow recommended H1N1 community mitigation and infection control measures. The U.S. Centers for Disease Control and Prevention (CDC) recommendation to stay home when sick is not feasible for the vast majority of MSFWs. Workers with families who depend on their limited income cannot afford to lose wages due to absence from work.¹³ Taking a day off will cost many farm workers their jobs because employers will often fire and replace an absent worker due to the time-sensitive demands of the agriculture industry.

School closures create hardships for MSFW parents, just as they do for working class families more broadly. When schools close—as they did in spring 2009 as a preventive measure and as they have in fall 2009 due to absenteeism—MSFW parents are often unable to stay home to care for their children. Even if schools remain open, interviewees recounted, sick children who are "staying home" may have to accompany their parents to work or be sent to neighbors for group child care. Inability to isolate and care for these children can contribute to the spread of influenza. Federal programs such as the Migrant and Seasonal Head Start (MSHS) provide pre-school and childcare services for approximately 40,000 migrant and seasonal children;¹⁴ some MSFWs, however, are unaware of these services. Despite this program and other smaller local efforts, the overall need for child care among MSFWs is not met routinely, let alone during a pandemic.

Finally, when MSFWs are able to stay home when sick with flu, public health guidance recommends isolation from family members or others in the household. However, several families or many individuals may share a single household, preventing isolation of sick individuals and increasing chances of illness spreading among the inhabitants.¹³ This study, for instance, revealed a migrant camp in a western state where 10–12 men or 2–3 families would share a small cabin.

Recommendations for Providing 2009 H1N1 Influenza Vaccine to MSFWs in Fall 2009 and Beyond

Focused on the near term, the following recommendations are intended to assist care providers and health officials during this fall and winter's flu season in vaccinating priority groups among MSFWs, and in reaching the entire population when sufficient vaccine is available. (Future reports will address more long-term interventions that are related to structural barriers to care.)

1. Recognize that many MSFWs may fall into one of the high priority groups for H1N1 vaccination.

MSFWs are a population with a high prevalence of chronic conditions, including HIV/AIDS, diabetes, and hypertension.^{15,16} In addition, MSFWs suffer higher rates of acute infections such as tetanus, salmonellosis, tuberculosis, and some respiratory and kidney infections^{15,16} Many of these conditions increase the risk for complications with influenza infection.¹⁷ In turn, individuals with these conditions fall into the high priority group for vaccination against H1N1.

Persons with chronic illness may be more likely to die or suffer illness that requires lengthy stays in intensive care units. The Texas state health department reports, for instance, that Hispanics, who comprise 37% of Texas' population and who have high rates of chronic illness, represented 52% of H1N1 deaths in the first 6 months of the 2009 pandemic (even with 17% of the deaths in patients with an unknown ethnicity or race). Hispanics also accounted for approximately two-thirds of hospital ICU admissions for H1N1.¹⁸

2. Offer vaccine to MSFWs regardless of their immigration status and even when vaccine supplies are scarce.

The federal government has publicly declared—as have some state and local governments—that eventually everyone should be immunized against 2009 H1N1 influenza, and for now, those in the highest risk groups should receive highest priority, regardless of immigration status.^{19,20} This recommendation is based on the recognition that most individuals are at risk of becoming infected with 2009 H1N1 influenza and transmitting infection to others.

3. Be cognizant of the political climate, which may doubly complicate outreach to and have adverse psychosocial effects on MSFWs.

Proposed healthcare reform legislation will likely exclude healthcare coverage for undocumented workers; indeed, there is even debate on whether legal permanent residents should be able to participate.²¹ In addition, initial shortages of vaccine have aroused public sentiment about who should receive scarce resources. For example, outrage over the news that detainees at Guantanamo were to be vaccinated for H1N1 led the Department of Defense to reverse the policy.²² During study interviews, several participants from community

health centers voiced the challenge of “flying under the radar” in outreach efforts to ensure that MSFWs learn of the availability of vaccine and other resources, while not alienating non-MSFW community members, who might not have access to comparable services.

4. Strive to bring vaccines to MSFWs; do not assume they can visit centralized vaccination sites.

The lack of job benefits, such as paid leave, often prevents migrant workers from coming to clinics, which is why going out to the fields to administer immunizations will likely increase participation. (In some localities studied, community health centers established good working relationships with employers in order to bring care to more MSFWs.) Providing vaccination clinics outside normal working hours and offering transportation to and from clinics will better accommodate the work schedules and logistical needs of migrant workers. Many study interviewees noted the success of mobile clinics and *promotoras* (ie, Hispanic community lay health workers) in reaching MSFWs and, in particular, in providing prenatal care for pregnant women, which is important in the setting of 2009 H1N1 influenza given the increased risk of complications among pregnant women.

5. Provide immunization cards to overcome problems in ensuring continuity of care.

Continuity of care is a universal challenge across MSFW communities, not just because the population as a whole tends to be transient, but also because of differences in health services across jurisdictions. Because use of electronic health records is limited, interviewees stressed the importance of using immunization cards to document vaccination status. Given the shortage of vaccine across the U.S., healthcare providers must make all possible efforts to ensure effective access for priority groups within the MSFW population. Knowing which vaccine (H1N1 or seasonal influenza) was administered, in what formulation (live or attenuated) it was given, and when it was administered can help ensure that patients, especially children, receive the correct vaccine at the appropriate time.

6. Use non-English, low-literacy, and low-numeracy communications in any vaccination campaign.

Healthcare providers should consider using local Spanish radio stations to provide MSFWs with accurate and timely information about vaccination and about sources of medical care. This broadcast approach can and should complement any publication of handouts and websites in Spanish. Providers should be cognizant that growing numbers of MSFWs speak indigenous languages, which means that materials written in Spanish may be as unhelpful as those written in English. The use of cartoons and pictograms may aid comprehension among MSFWs with low literacy and may be especially useful in alerting them to the availability of vaccine.

Vaccination sites should convey information in multiple forms, using materials that are written in Spanish and that employ graphics (cartoons and pictograms) rather than words; ideally, bilingual care providers or interpreters should be available to explain procedures and answer questions.

Several websites offer materials written in Spanish for use in healthcare settings:

- California Department of Public Health’s *Datos e Información – Influenza H1N1* page (<http://www.cdph.ca.gov/HealthInfo/discond/Pages/SwineInfluenzaSpanish.aspx>)

- Centers for Disease Control and Prevention's *Gripe H1N1 de 2009* page (<http://espanol.cdc.gov/enes/h1n1flu/>)
- U.S. Department of Health and Human Services' Office of Minority Health *Influenza H1N1 - ¡Prepárese!* page (<http://minorityhealth.hhs.gov/espanol/templates/browse.aspx?lvl=2&lvlid=194>)
- National Council of La Raza's *Información sobre la gripe H1N1* page (http://www.nclr.org/section/gripe_h1n1)

Conclusion

Migrant and seasonal farm workers are a population that is highly vulnerable to pandemic flu due to their economic and social marginality and their already impaired health status. Crop workers and their families could benefit greatly from vaccination. Providers are encouraged to develop culturally and linguistically competent education campaigns and to present ready opportunities for MSFWs to access vaccine, beginning with high priority groups.

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